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2613	5

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Please find below and/or attached an Office communication concerning this application or proceeding.

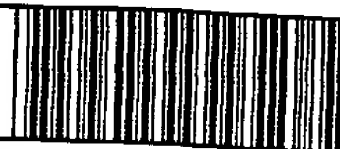Commissioner of Patents and Trademarks

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____3____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Apr 10, 2001* _____ .

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-7* _____ is/are pending in the application.

    4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-7* _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

    a)☐ All b)☐ Some* c)☐ None of:

    1. ☐ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

1.   Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 3 are rejected for the same reasons as set forth in items (4) and (6) of paragraph (1) of the last Office Action (See Paper no. 2). The applicant's traversal of the rejection as shown at pages 7-8 of the amendment filed April 10, 2001 is not persuasive for the following reasons. Basically, the time frame between when the invention was reduced to practice till the time the application is filed, for example, there could be various versions of the recommendations. And unless the versions and dates of the recommendations are provided, the metes and bounds of the claimed limitations are not clearly set forth, and thus renders the claims indefinite.

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gormish et al of record (5,689,589) in view of Bowater et al of record (5,404,446) and Davis et al of record (5,838,678).

Gormish et al discloses a data compression for palettized video images as shown in Figures 1-3, and substantially the same method for producing a compressed video bitstream that

includes compressed video data for a plurality of frames from data that specifies a single still

image as claimed in claims 1 and 4, comprising substantially the same fetching the data for the still

image (i.e., 104 of Figure 1); encoding data for the still image into data for an intra frame (i.e.,

108 of Figure 1 and see column 4, lines 49-65); storing the encoded I frame data (i.e., 204C of

Figure 2); assembling the compressed video bitstream by appropriately combining data for at least

a single copy of the stored I frame (see Figure 2); whereby decoding of the compressed video

bitstream produces frames of video that do not appear to pulse visually (see 122 of Figure 1 and

Figure 3); and wherein parameters employed in encoding the data for the still image produce an

amount of data for the I frame that approaches, but remains less than, storage capacity of a buffer

memory included in a decoder that stores the compressed video bitstream (see 204D of Figure 3).

Gormish et al does not particularly disclose, though, the followings:

(a) assembling the compressed video bitstream by appropriately combining data for at least

one null frame, and various headers required for decodability of the compressed video bitstream;

wherein the null frames assembled into the compressed video bitstream also include bitstream

stuffing whereby the compressed video bitstream is transmittable at a pre-established bitrate as

claimed in claims 1 and 5;

(b) the assembled compressed video bitstream is decodable in accordance with the MPEG-

1 standard; and the various headers assembled into the compressed video bitstream include a

sequence header beginning the compressed video bitstream, at a beginning of group of pictures, a

group start code, for each encoded frame, a picture start code, and a sequence end code ending

the compressed video bitstream as claimed in claims 2 and 6; and

(c) the assembled compressed video bitstream is decodable in accordance with the MPEG-

2 standard; and the various headers assembled into the compressed video bitstream include a

sequence header beginning the compressed video bitstream; for each encoded frame a picture

header, and a picture coding extension; and a sequence end code ending the compressed video

bitstream as claimed in claims 3 and 7.

Regarding (a) to (c), Bowater et al discloses a dual buffer video display system as shown

in Figure 1, and teaches the conventional assembling of compressed video bitstream by combining

null frames (see column 4, lines 11-68). In addition, Davis et al discloses a method and device for

preprocessing streams of encoded data to facilitate decoding streams back to back as shown in

Figures 2, 3A, 3B, 5, and 6, and teaches the conventional MPEG-1 and MPEG-2 standard

decodings (see column 1), assembling the compressed video bitstream by appropriately combining

data for headers such as sequence header, group start code, picture start code, sequence end

code, picture header, and picture coding extension (see column 3, line 41 to column 4, line 16), as

well as bitstream stuffings whereby the compressed video bitstream may be transmitted at a pre-

established bitrate (see Figure 2). Therefore, it would have been obvious to one of ordinary skill

in the art, having the Gormish et al, Bowater et al, and Davis et al references in front of him/her

and the general knowledge of MPEG specification requirements, would have had no difficulty in

providing the MPEG-1 and MPEG-2 decodings with the required header data as well as including

the null frames and bitstream stuffings in the compressed video bitstream as shown in the combination Bowater et al and Davis et al for the compressed video data within encoder and decoder as shown in Figures 1-3 of Gormish et al for the same well known video bit processing and standard compliance purposes as claimed.

4.   Regarding the applicant's arguments at pages 9-10 of the amendment filed April 10, 2001 concerning that "... Other than for the text identified above in the Examiner's Action ... Applicant is unable to find anywhere in that reference any further use of the word "still" or of the reference number 104. Also, Applicant is unable to find in the cited text any express discussion regarding an intra ("I") frame, i.e., a frame of compressed video data which can be decoded without reference to data in another frame of video data ...", the Examiner wants to firstly point out that it is not particularly understood why it is necessary to have other references to the still image or of reference number 104 within Gormish et al as argued by the applicant. Secondly, it is well recognized in the art of lossless and lossy compression of digital video images as identified at column 1 of Gormish et al involves intra- and inter-frame processings. The Examiner wants to also stress that: One of ordinary skill in the art is presumed to possess a certain amount of background knowledge independent of the references. In re Sovish, 769 F.2d 738, 226 USPQ 771 (Fed. Cir. 1985); In re Jacoby, 309 F.2d 513, 135 USPQ 317 (C.C.P.A. 1962). The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F.2d 1385, 163 USPQ 545 (C.C.P.A. 1969). With the above in mind, it is submitted

that compressor 108 of Gormish et al provides the same encoding data for the still image 104 into

data for an intra frame as claimed.

Regarding the applicant's arguments at pages 10-11 of the amendment filed April 10,

2001 concerning that "... Despite a diligent search of the Gormish et al patent, Applicant is unable

to find therein any disclosure or suggestion of ... a null frame; or combining data for the I frame

with that for a null frame ...", the Examiner wants to point out that: One cannot show non-

obviousness by attacking references individually where, as here the rejections are based on

combination of references. In re Keller, 208 USPQ 871 (CCPA 1981). Bowater et al

nevertheless teaches the conventional assembling of compressed video bitstream by combining

null frames (see column 4, lines 11-68 of Bowater et al).

Regarding the applicant's arguments at pages 11-13 of the amendment filed April 10,

2001 concerning in general that "... Despite diligently searching the Bowater et al patent,

Applicant is unable to find there any disclosure or suggestion that the disclosed buffering

technique prevents still images from pulsing visually ...", the Examiner wants to point out that in

Gormish et al is being relied upon for the claimed feature of "decoding of the compressed video

bitstream produces frames of video which produces image that do not appear to pulse visually".

Further, there is nothing in Gormish that identifies that the produced images would pulse visually.

Since the lossy and lossless compression of video images as identified at column 1 of Gormish et

al are concerned with the looks of the reconstructed image and image sharpness recoveries, it is

submitted that the decoder of Gormish et al provides substantially the same if not the same

decoding of the compressed video bitstream producing frames of video which produces image that do not appear to pulse visually as claimed.

Regarding the applicant's arguments at pages 13-15 of the amendment filed April 10, 2001 concerning in general that "... Despite a diligent search of the Davis et al patent, Applicant is unable to find any mention there that the disclosed preprocessing method may be used advantageously in encoding still images in accordance with the MPEG I or MPEG II standards, or of the use of null frames in such encodings ...", the Examiner wants to point out that such arguments have been addressed in the above.

Regarding the applicant's arguments at pages 18-20 of the amendment filed April 10, 2001 concerning in general that "... The Examiner's Action eclectic use of these three (3) widely disparate references in rejecting claims 1-5 for obviousness under 35 U.S.C. 103(a) raises a question of what might possibly motivate one of ordinary skill in the art to select individual elements respectively from three (3) references, which respectively relate to encoding, decoding and preprocessing to obtain a method for encoding still images ...", the Examiner wants to point out that it is still deemed proper to use the applied three references for the same reasons as set forth above.

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office

action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

6.   **Any response to this final action should be mailed to:**

        Box AF

                Commissioner of Patents and Trademarks

                Washington, D.C. 20231

Art Unit: 2613

or faxed to:

(703) 308-9051, (for formal communications; please mark "EXPEDITED

PROCEDURE")

Or:

(703) 308-6306 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington. VA., Sixth Floor (Receptionist).

7.   Any inquiry concerning this communication or earlier communications from the examiner
should be directed to Richard Lee whose telephone number is (703) 308-6612.

        Any inquiry of a general nature or relating to the status of this application should be
directed to the Group receptionist whose telephone number is (703) 305-4700.

RICHARD LEE
PRIMARY EXAMINER

Richard Lee/rl

6/7/01